

## **SPECIAL PROVISION FOR GENERAL PROGRESS SCHEDULE**

This Special Provision will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** Prepare and maintain a progress schedule for the project using the critical path method.

**2.0 MATERIALS.** Reserved.

**3.0 CONSTRUCTION.** Submit a progress schedule consisting of an activity network analysis as described herein.

**3.1 Network Analysis System.** Include a Gantt chart that is partitioned by major work elements of the project and shows the activities for each work element.

The Gantt chart must show the order and interdependence of activities and the sequence in which the work is to be accomplished. Follow the basic concept of a network analysis to show how the start of a given activity is dependent on the completion of preceding activities. Include any restrictions and any project milestones as indicated in the proposal or otherwise known.

Include in the network activities, the submittal and approval of samples of materials and shop drawings; the procurement of critical materials and equipment, and fabrication of special material or equipment and their installation and testing. Show contract required dates for completion of all or parts of the work.

Show on the Gantt chart the minimum number of activities necessary to accurately reflect the flow of work. Determine and identify the critical path and identify where float or slack exists.

Additionally, include with the Gantt chart a tabulation of each activity. Furnish the following information as a minimum for each activity:

- 1) preceding and succeeding event or work item numbers
- 2) activity description
- 3) estimated duration of activities (in days)
- 4) early start date
- 5) early finish date
- 6) late start date
- 7) late finish date
- 8) free float (in days)
- 9) total float (in days)

The original or updated schedule documents should describe the upcoming 45 days of activities in Level 1 detail and the remainder of the project in at least Level 2 detail. The levels of detail are described according to the following:

- 1) Level 1. This level of detail presents a logically flowing schedule of the daily activities required to complete the project. The maximum activity length should be 10-days unless approved by the Engineer. Locations and/or stations numbers should be used to further describe activities.
- 2) Level 2. This level of detail presents the logical progression of activities required to complete the controlling items of work, in the time limits allotted in the contract documents, to the satisfaction of the Engineer.

**3.2 Submission and Review Procedures.** Submit the complete proposed project schedule, consisting of the network analysis described above at the preconstruction conference.

Participate with the Engineer in a review of the proposed project schedule at a project schedule review meeting to be conducted within 10-days following the preconstruction conference. Resubmit all necessary revisions within 10 days after the initial review. When a change in the method of operation or scheduling is desired, notify the Engineer in writing of the proposed change.

Provide 4 copies of the initial project schedule submittal and subsequent revisions for review. Ensure all submitted diagrams are legible.

**3.3 Monthly Updates.** Submit a report of the actual construction progress by updating the project schedule each month. Reflect the work as-built within 2 working days of the date of the report, and reflect the work remaining to be done as planned. The updated schedule should follow the requirements of the network analysis system described in part 3.1. Provide 4 copies.

Establish the dates of submittal with the Engineer at the schedule review meeting. If an updated project schedule is not provided by the established date, the Engineer will not process pay estimates until it is.

**3.4 Significant Changes.** Update and resubmit the project schedule revisions whenever a situation arises or an event occurs that significantly affects the progress of the work. If an updated project schedule is not provided after significant changes occur, the Engineer will not process pay estimates until it is.

**3.5 Float.** Float is the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities on the project schedule. The Department will consider extensions of time only when the critical path determining the schedule finish date of the project is affected.

**4.0 MEASUREMENT.** The Department will measure the CPM Schedule as Lump Sum.

**5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02570	Project CPM Schedule	Lump Sum

The Department will consider payment as full compensation for all work required in this provision.

January 1, 2008